CITY OF LONGBEACH

Date: September 20, 2023

To: Mayor and Members of the City Council

From: Thomas B. Modica, City Manager

Subject: Response to City Council Action on the Impacts of Sewage Spills

On May 9, 2023, City Council approved a motion requesting that the City Manager:

- Research and report on the environmental, public health, social, fiscal, and economic impacts on the City of Long Beach (City) from sewage spills;
- Provide a report on the City's projects funded by Measure W and projects countywide related to eliminating sewage from entering waterways and the ocean;
- Work with the Regional Water Quality Control Board and other enforcement agencies to report on recent sewage spills in Long Beach that violated the Clean Water Act and other related regulations, including the name of the responsible agency or entity, date of occurrence, date of any water area closures, amount of sewage spilled, and impact costs; and,
- Research and provide options for the City to seek compensatory damages and reimbursement for costs incurred by the City related to sewage spills.

Staff from the City Manager's office, City Attorney's office, and the Departments of Health and Human Services, Public Works, and Utilities worked to respond to these items. Staff met with the Los Angeles Regional Water Quality Control Board, Los Angeles County Sanitation Districts, and Los Angeles County Public Works to gather information about upstream sewage spills, regional response, and resources available when spills occur. The purpose of this memorandum is to report back on City Council's requests related to the impacts of sewage spills on the City.

Background

Public sewer systems in California are regulated by the California State Water Resources Control Board (State Board) and must comply with the "Statewide Waste Discharge Requirements General Order for Sanitary Sewer Systems," <u>Water Quality Order No.</u> <u>2022-0103-DWQ</u> (General Order). Noncompliance with the requirements of the General Order, including sewage spills, are violations of the California Water Code, and public sewer agencies must develop and implement Sewer System Management Plans to minimize the occurrence and mitigate the consequences of sewer spills.

All sewage spills must be reported to the California Governor's Office of Emergency Services, local Health Officer, and State Board's <u>California Integrated Water Quality</u>

System Project (CIWQS) Sanitary Sewer System Database. Sewer spills are categorized by severity and volume, with the more serious categories requiring more extensive actions by the sewer system operator that caused the spill (see below). Sanitary sewer overflows occur when untreated sewage is released into the environment and waterways. Some of the primary causes leading to these overflows include the age of existing sewer collection infrastructure, lack of maintenance, poor operational procedures, and inadequate flow capacity or blockages. Sewage can contain disease-causing pathogens and viruses, which can lead to life-threatening illnesses. When sewage spills contaminate public places and water sources, people are at risk of exposure to untreated sewage by swimming in open waters, drinking from contaminated community water supplies, and eating contaminated fish or shellfish.¹

| Spill Category | Description |
|----------------|---|
| Category 1 | A spill of any volume of sewage that results in a discharge to surface water. |
| Category 2 | A spill of 1,000 gallons or greater of sewage that does not discharge to surface water. |
| Category 3 | A spill equal to or greater than 50 gallons but less than 1,000 gallons of sewage that does not discharge to surface water. |
| Category 4* | A spill of less than 50 gallons of sewage that does not discharge to surface water. |

*New category as of June 5, 2023

Local agencies are responsible for maintaining and operating their sewer systems, as well as reporting any spills to the CIWQS database. The State Board regulates local agencies and may take enforcement action against any agency that fails to comply with the General Order. For example, if a local agency fails to appropriately handle a spill that originated in its system, the State Board could take punitive action such as issuing fines. The location of the spill's origination point determines which local agency will be held responsible.

Long Beach Sewer System

In Long Beach, the Utilities Department (Utilities) oversees the operation and maintenance of the City's Sanitary Sewer System and is the local agency that would take responsibility for reporting and mitigating any spills that originate from its system. Utilities may take action to prevent the occurrence of discharges and has enforcement powers should the cause of a discharge be traced back to a residential or commercial entity in the City. Utilities has a long history of successfully preventing sanitary sewer overflows and is committed to continuous improvement of policies and procedures to preserve the environment and protect the health of Long Beach residents, businesses, and visitors.

¹ <u>https://www3.epa.gov/npdes/pubs/sso_casestudy_control.pdf</u>

Utilities is responsible for the safe collection and conveyance of over 40 million gallons of wastewater per day. Wastewater is moved away from Long Beach's homes and businesses through sewer lines, eventually reaching wastewater treatment facilities owned and operated by the Los Angeles County Sanitation District. There, it is treated to allow for safe disposal or disinfected for use as tertiary recycled water. Long Beach's Sanitary Sewer System is comprised of 712 miles of gravity mains, 7.6 miles of force mains, 28 sewer lift stations, over 115,000 lateral connections, and approximately 16,000 sewer manholes. The Utilities' Sewer Operations Division is responsible for all routine and preventative maintenance activities, including hydro-jet cleaning of all sewer main lines, regular sewer inspections via closed-circuit television, and sewer point repairs. The Engineering Bureau implements all sewer-related Capital Improvement Plans to rehabilitate the City's sewer infrastructure and ensure sufficient capacity to convey peak flow rates.

Utilities takes extensive measures to minimize the occurrence of sewer spills throughout Long Beach. In addition to the routine maintenance already mentioned, the Sewer Operations team utilizes SmartCover[®] technology in select sewer manholes. This consists of a sensor that alerts personnel when water levels have exceeded a predetermined threshold, signaling the potential for an imminent sewer spill. An early alert is communicated via text message or email and allows sewer field crews to respond to the location in time to clear the system clog before it becomes an overflow. This technology has helped to prevent hundreds of sewer spills since it was first implemented several years ago. Additionally, Utilities has the authority to limit the discharge of fats, oils, and grease to the sewer system—a known cause of many sewer line stoppages that can lead to sewer spills. Utilities has an ongoing memorandum of understanding with the City's Environmental Health Bureau of the Department of Health and Human Services to provide annual inspections and monitor compliance of restaurants in Long Beach.

Utilities further minimizes the impact of sewer spills through an extensive and wellpracticed procedure to deal with spills that do occur. This protocol includes containing the spill area to minimize the contamination area, setting up barriers so that spills do not reach catch basins, temporarily plugging the downstream storm drain for spills that have entered the storm drain system, using a hazardous waste contractor to recover spilled sewage from the containment area, and sanitizing the spill area after sewage recovery.

Attachment A shows spill performance as a rate of spills per 100 miles of pipeline per year across the City, region, and state, demonstrating that the City's sewer system regularly outperforms other sewer systems in all spill categories. In fact, the vast majority of sewer spills in Long Beach fall into the less serious Category 3, with very rare occurrences of Category 1 spills. The CIWQS database compiles spill data and produces reports which can be used to compare individual sewer system performance with the region and state.

The Impacts of Sewage Spills

For spills that occur in the region and upstream—which overwhelmingly are the spills that impact Long Beach—the Los Angeles Regional Water Quality Control Board (LARWQCB) staff review information submitted to the statewide CIWQS database, respond to spills, conduct investigations, and if determined appropriate, develop informal and formal enforcement actions against the responsible parties to address violations resulting from sewage spills. Los Angeles County Sanitation Districts (LACSD) is the public agency that owns and operates sanitary sewer systems and pumping plants throughout the region. When a sewage spill occurs within LACSD's system, LACSD is required to monitor all spills that reach receiving waters for bacteriological indicators and other relevant parameters; develop a monitoring plan that samples at point of entry, upstream, and downstream to define the geographical extent of the impacts; and monitor water quality daily until two consecutive sets of bacteriological monitoring show a return to background levels.

The City, by contrast, is responsible for monitoring and sampling water quality in Long Beach. State regulations require the City to perform the testing for sewage spills, under Cal. Code Regs. Title 17. Because the testing must be done by a "local health officer" and the City has its own Department of Health and Human Services (Health), the City is obligated to perform the testing to assess water quality at beaches and issue advisories and closures as appropriate. To protect the safety of residents and visitors, Health is responsible for collecting water samples from the beaches, bays, and as needed from the marinas and the Harbor area. On the rare occasion when there is a sewage spill and water quality sample results exceed State standards, the City closes impacted beaches. Warning signs are posted indicating that State bacteriological standards have been exceeded and that contact with water in the area may increase the risk of illness to a swimmer. The warning signs are removed after additional testing finds that bacterial levels have returned to acceptable levels. Beaches are reopened only after two consecutive test results indicate ocean water meets State standards.

Assembly Bill 411, enacted in 1999, requires local health officers to conduct weekly bacterial testing of water adjacent to public beaches with more than 50,000 annual visitors. The City's Health Department is responsible for collecting water samples weekly at fifteen locations, including the ocean coastal and bay swimming areas, and collected samples are submitted and analyzed at the City's Public Health Lab.² Health receives an annual \$100,000 grant from the State Water Resources Control Board for these activities, but actual costs associated with routine water sampling total more than \$170,000 annually. Additionally, the Department of Public Works funds beach water sampling for two additional days at five sites located west of the Belmont Pier through an agreement with Health, in accordance with the City's storm water permit.

² <u>https://longbeach.gov/globalassets/health/media-library/images/inspections-and-reporting/inspections/environmental-health/water-quality/long-beach-sampling-sites</u>

Few studies have been conducted on the economic impacts of beach closures and potential loss of tourism-related revenue streams. The Environmental Protection Agency, for example, researched the economic costs of beach closures in Cape Cod, Massachusetts, estimating total losses at \$15,000 per day on popular beach days.³ An academic study analyzing the impact of beach closures estimated a consumer surplus value of a beach visit at around \$22 for the Cape Cod area, through revenues such as parking fees and enforcement.⁴ Generally, these studies estimate the value of a beach visit by taking the revenues generated per person on a typical day, then subtracting the loss during a beach closure by measuring the decrease in average visits expected.

Extrapolating estimates of the broader economic impact of beach closures to our experience in Long Beach, however, presents challenges. Long Beach has approximately seven miles of public beach and bays, attracting thousands of residents and visitors each year. Yet beach visits and usage are different in Long Beach than many other Southern California beaches, due in part to the lack of wave activity. It is unclear whether the same economic impact can be assumed for Long Beach as for other beach communities. The City, moreover, does not have a methodology to track beach attendance consistently, and programming along the waterways changes significantly depending on the time of year. The City Attorney's office advises that based on the data generally available to City staff, it is very unlikely that the City could prove and recover indirect damages which may result from a beach closure, such as a reduction in sales tax or transient occupancy tax revenue.

Attachment B details the beach closure information requested by Council, except for impact costs which the LARWQCB does not have. In total, there have been 63 days of beach closures over the past five years, with a vast majority of closures occurring between the months of December and March, when heavy rains and debris are more likely to overload the sewer system. These months are also when we generally see lower beach usage compared to peak summer times. Parking revenue data for the lots closest to the City's beaches show a decline in average daily revenue compared with the averages in comparable months, but the rate of decline varies significantly across beach closures, ranging from virtually no loss to upwards of a thousand dollars per day.

Estimating the direct fiscal impact of beach closures on City operations, while difficult for past incidents, is possible for future events. Every sewage spill requires staff time to communicate and evaluate data to determine if any beach closure is warranted, but not every sewage spill requires a beach closure. When a known sewage spill occurs that warrants a beach closure by the City's Health Officer, the following personnel are consulted: Health Director, Health Officer, Public Information Officer, Bureau Manager of Environmental Health, Environmental Health Operations Officer, Environmental Health Specialist IV (Supervisor), two Environmental Health Specialist IIIs, two Environmental

³ <u>https://www.epa.gov/sciencematters/helping-coastal-communities-address-beach-closures</u>

⁴ <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6104649/</u>

Health Specialist IIs, Clerk Typists, Microbiologist III (Supervisor), and Microbiologist, in addition to Lifeguards employed by the Long Beach Fire Department to monitor the beaches. Such personnel could separately account for and track time spent responding to the spill, and the direct costs of all such personnel could be used as a basis for a legal action against the party responsible for the spill causing the beach closure.

Measure W Projects

Council requested information regarding projects funded by Measure W, or the <u>Safe</u>, <u>Clean Water Program</u>. In November 2018, Los Angeles County voters approved Measure W, which generates up to \$285 million per year through a special parcel tax equaling 2.5 cents per square foot of impermeable surface area on properties within the LA County Flood Control District. Funds are used for multi-benefit stormwater and urban runoff capture projects that improve water quality, increase local water supply, and enhance communities.

The City has benefited greatly from the funding received through Measure W. *Attachment C* provides a list of stormwater projects in Long Beach funded by the Safe, Clean Water Program. More than \$37 million has been awarded to Long Beach projects, and another nearly \$14 million is under consideration. *Attachment C* also lists some of the regional projects that are funded by Measure W, as requested by Council.

It is important to note, however, that sanitary sewer systems and the stormwater drain system are distinct. While the sewer system is a closed system intended for the collection and conveyance of wastewater only, the stormwater system is open and allows for the entrance of outside substances like rainwater to largely flow directly into the ocean. The water that goes down sinks and toilets in homes or businesses goes into the sanitary sewer system and is directed to a treatment plant where it is treated and filtered. Water that flows down driveways and streets and into a gutter goes into a storm drain which flows directly to a lake, river, or ocean. This water may pick up pollutants along the way which are never treated.

Measure W provides funding for surface water quality infrastructure to prevent coastal waters and beaches from receiving trash and contaminants found in stormwater. Funding is only allocated for projects associated with the storm drain system and associated stormwater runoff, not sewage. Sewer systems, where sewage overflows originate, are not included in the Measure W program, though the projects listed in Attachment C will provide critical water quality benefits for Long Beach and the region.

Seeking Recovery for City Costs from Regulatory Agencies

The California Water Code dictates which account receives penalties approved by the Los Angeles Regional Water Quality Control Board (LARWQCB). When there are no viable responsible parties available to undertake cleanup or abatement work related to sewage spills, penalties are commonly paid to the State Water Resources Control Board's

<u>Cleanup and Abatement Account (CAA)</u>. Money paid to the CAA is used to provide grants for the cleanup or abatement of a condition of pollution around the State, up to \$500,000 per project. Appropriations to the CAA averaged approximately \$34 million over the past couple of fiscal years.

In a settlement, by contrast, it is possible for some or potentially all the penalty amount to be re-invested directly into the community impacted by the violations in certain cases. The types of projects that can be funded include supplemental environmental projects (SEPs), enhanced compliance actions, or compliance projects. These actions must be agreed to voluntarily by the discharger and comply with the requirements outlined in the Water Boards' policies. A list of the SEPs funded by the LARWQCB can be found <u>here</u>.

Seeking Recovery of Damages through Legal Action

The City could seek to recover damages through legal action against the polluter(s). Damages may be recoverable under the Clean Water Act (33 U.S.C. §1251 et seq.), the Porter-Cologne Water Quality Control Act (Cal. Water Code §13000 et seq.), and/or under California tort law (e.g. negligence).

While some damages may be difficult to calculate as described above (e.g. lost parking revenue), others such as employee wages for clean-up, traffic control, beach inspection/closure/patrol, equipment costs for clean-up, etc., should be relatively simple to measure. And, if damages are too speculative, the City could seek non-monetary relief, such as an injunction.

Staff Recommendations

Based on these findings, it is clear that the vast majority of impacts the City faces from beach closures arise from upstream sewage spills. A more coordinated, strategic approach to regional partnerships and advocacy is needed to advance the City's interests. The following are some recommendations for consideration as the City continues to address the issue of beach closures due to upstream sewage spills:

• Estimating Fiscal Impact and Considering Legal Action: To better estimate the direct fiscal impact of beach closures in the future, the City could utilize a special timesheet coding to begin tracking personnel costs specific to a beach closure from a sewage spill, similar to what the City has done during the COVID-19 pandemic and homelessness emergency proclamation. While the City conducts regular water quality testing, it would be easier to disentangle staff time related to a beach closure by tracking staff hours with a distinct timesheet code. The causes of an upstream spill can be investigated and evaluated, and thereafter personnel costs can be used to support a potential damage claim and/or lawsuit against the responsible sewer operator.

- Leveraging Regional Partnerships: The City can continue to support and leverage regional resources to address upstream sewage spills that impact Long Beach. The Gateway Cities COG could be an important partner for the City to engage regional leaders in the effort to address sewage spills that flow into public waterways. And while stormwater infrastructure is distinct from sewer infrastructure, the City also has actively supported the establishment of the Lower Los Angeles River and San Gabriel River Recreation and Park Districts, which could provide opportunities for collaboration and funding to advance stormwater projects upstream and benefit the region as a whole.
- Advocating for Regional Infrastructure Improvements: The City can strengthen its partnership with Los Angeles County Public Works' InfrastructureLA Initiative, which was established by the Los Angeles County Board of Supervisors in April 2022 to maximize the share of federal infrastructure funding coming to the County for regional projects and unincorporated areas. The objective of the Initiative focuses on projects that advance equity, sustainability, and climate resilience goals. Staff has met with InfrastructureLA representatives to highlight the City's interest in addressing upstream sewage spills that impact water quality and beach closures, and we will continue to track funding opportunities that might benefit the development of regional infrastructure to prevent spills.
- Advocating for Changes to State Funding: As described above, when there are no • stakeholders responsible for a sewage spill able to conduct cleanup or abatement work, penalties can go into the State Cleanup and Abatement Account, which provides grants statewide. These funds do not automatically go to local communities that are impacted by a sewage spill, like the SEPs agreed to through a settlement with responsible parties. It may be worthwhile to include language in the City's Legislative Agenda to advocate for funding received through enforcement actions to go to the areas that experienced the sewage spill for preventative measures. Assembly Bill 753, for example, proposes to divert 40 percent of the annual penalties deposited in the State Cleanup and Abatement Account to regional boards on a proportional basis for restoration projects with a significant nexus to the community harmed by the original water guality violation. The bill is currently in the Senate Appropriations Committee and would require a two-thirds vote to pass. The Los Angeles Regional Water Quality Control Board also has begun discussions about how to draw down resources to the regions impacted by spills, and the City could support these advocacy efforts to change the State program.

Next Steps

Staff will present these findings to the Climate, Environment, and Coastal Protection

Committee, as directed by the City Council motion. Meanwhile, if you have any questions, please contact Tyler Bonanno-Curley, Acting Deputy City Manager, at (562) 570-5715 or Tyler.Curley@longbeach.gov.

- ATTACHMENTS: A: SEWAGE SPILL COMPARISONS B: BEACH CLOSURES IN LONG BEACH C: MEASURE W FUNDING
- CC: DOUGLAS P. HAUBERT, CITY PROSECUTOR LAURA L. DOUD, CITY AUDITOR LINDA F. TATUM, ASSISTANT CITY MANAGER TERESA CHANDLER, DEPUTY CITY MANAGER APRIL WALKER, ADMINISTRATIVE DEPUTY CITY MANAGER MEREDITH REYNOLDS, DEPUTY CITY MANAGER KEVIN LEE, CHIEF PUBLIC AFFAIRS OFFICER MONIQUE DE LA GARZA, CITY CLERK DEPARTMENT HEADS

2023 (Jan. – Jun.) Spill Comparison by Category for Long Beach, Region, and State Operational Indices: Long Beach Water Dept. CS (SSO program)

| | Spill Rate Indice (spills/100mi/yr) | | | | | | | | |
|--|-------------------------------------|------------|---------------|-------------|------------|---------------|-------------|-------------|---------------|
| | | Category 1 | | | Category 2 | | Category 3 | | |
| | Mainlines | Laterals | Not Specified | Mainlines | Laterals | Not Specified | Mainlines | Laterals | Not Specified |
| Long Beach Water Dept. CS (SSO program) | 0.0 | 0.0 | 0.0 | 0.57 | 0.0 | 0.0 | 1.71 | 0.88 | 0.0 |
| State Municipal (Public) Average | <u>7.53</u> | <u>4.2</u> | <u>12.99</u> | <u>6.07</u> | <u>0.0</u> | <u>30.02</u> | <u>7.61</u> | <u>20.5</u> | <u>9.16</u> |
| Region Municipal Average | <u>3.16</u> | <u>0.0</u> | <u>0.0</u> | <u>1.52</u> | <u>0.0</u> | <u>3.28</u> | <u>4.32</u> | <u>0.88</u> | <u>3.28</u> |

2022 Spill Comparison by Category for Long Beach, Region, and State

| | Snill Rate Indice (snills/100mi/vr) | | | | | | | | |
|--|-------------------------------------|-------------|---------------|-------------|-------------|---------------|-------------|--------------|---------------|
| | | Category 1 | | Category 2 | | | Category 3 | | |
| | Mainlines | Laterals | Not Specified | Mainlines | Laterals | Not Specified | Mainlines | Laterals | Not Specified |
| Long Beach Water Dept. CS (SSO program) | 0.0 | 0.0 | 0.0 | 0.14 | 0.0 | 0.0 | 3.38 | 1.53 | 0.0 |
| State Municipal (Public) Average | <u>3.71</u> | <u>1.13</u> | <u>3.82</u> | <u>1.71</u> | <u>0.72</u> | <u>8.95</u> | <u>5.6</u> | <u>41.69</u> | <u>1.92</u> |
| Region Municipal Average | <u>2.42</u> | <u>0.0</u> | <u>0.84</u> | <u>0.6</u> | <u>0.0</u> | <u>0.38</u> | <u>2.35</u> | <u>1.53</u> | <u>0.53</u> |

Operational Indices: Long Beach Water Dept. CS (SSO program)

2021 Spill Comparison by Category for Long Beach, Region, and State

| Operational Indicae' | Long Reach Water Dept (CS (SSO program) |
|----------------------|---|
| Operational indices. | Long beach water Dept. C3 (330 program) |
| | |

| | Spill Rate Indice (spills/100mi/yr) | | | | | | | | | |
|--|-------------------------------------|-------------|---------------|-------------|-------------|---------------|-------------|--------------|---------------|--|
| | | Category 1 | | | Category 2 | | Category 3 | | | |
| | Mainlines | Laterals | Not Specified | Mainlines | Laterals | Not Specified | Mainlines | Laterals | Not Specified | |
| Long Beach Water Dept. CS (SSO program) | 0.0 | 0.22 | 0.0 | 0.14 | 0.0 | 0.0 | 2.95 | 0.65 | 0.0 | |
| State Municipal (Public) Average | <u>4.76</u> | <u>1.51</u> | <u>4.41</u> | <u>3.17</u> | <u>0.26</u> | <u>4.24</u> | <u>6.14</u> | <u>36.73</u> | <u>1.46</u> | |
| Region Municipal Average | <u>1.88</u> | <u>0.22</u> | 2.82 | <u>0.88</u> | <u>0.0</u> | <u>0.84</u> | <u>4.28</u> | <u>0.65</u> | <u>0.43</u> | |

Attachment B: Beach Closures in Long Beach

| Spill Start | Collection System | Location | Spill Volume | Spill Volume Recovered | Spill Volume Reached Land | Spill Volume Reached Surface | Reported Spill Cause | Surface Water Impact | Beach Impact | Total Days of Beach Closure |
|-------------|---|---|-----------------|------------------------------|------------------------------------|---------------------------------------|--|--|--|--------------------------------------|
| 12/17/2018 | Glendale City CS | 1003 Rossmoyne Ave & 900 Blk E. Glenoaks Blvd., CA | 11,730 | 1,925 | 3,395 | 7,735 | Grease and Roots | Los Angeles River | Closed all 9 coastal beaches. | 11 |
| 2/14/2019 | Hyperion CS | 2990 North Silver Lake Blvd, Los Angeles, CA | 764,103 | 0 | 0 | 764,103 | Flow Exceeded Capacity | Los Angeles River | Closed all 9 coastal beaches. | 6 |
| 1/12/2020 | Hawaiian Gardens City CS | 2031-0372 (11940 Carson Street, Hawaiian Gardens), CA | 12,000 | 1,000 | 0 | 11,000 | Grease Deposition | San Gabriel River | Closed all 9 coastal beaches. | 2 |
| 2/21/2020 | Hyperion CS | 1020 South Fickett Street, CA | 17,320 | 4,500 | 0 | 12,820 | CS Maintenance Caused Spill / Damage | Los Angeles River | Closed B5,B56,B60,B7,B8,B9 | 6 |
| 12/25/2020 | County Sanitation District Joint Outfall CS | Joint Outfall A - Unit 1A Long Beach WRP Interceptor, Sect. 2, Sewage Force Main | 223,806 | 70 | 1,264 | 222,542 | Malfunction of a switchboard process logic controller in the control system | Los Cerritos Channel, Alamitos Bay | All 15 sampling locations in the City | 2 |
| 2/22/2021 | Hyperion CS | 2000 West Blake Avenue | 26,241 | 0 | 0 | 26,241 | Bypass pump had a mechanical failure | Los Angeles River | Closed B5, B56, B60, B7, B8 | 3 |

Attachment B: Beach Closures in Long Beach

| 12/30/2021 | Los Angeles County Sanitation Districts | 216th Street Replacement Trunk (District 8) | 8,613,558 | 35,000 | 35,000 | 8,578,558 | Pipe collapse on the 216th Street Relocation Trunk Sewer between MHs 08 0644 and 08 0476 | Dominguez Channel | Closed all 9 coastal beaches. (based on original press release, closure started on 12/31/21) | 5 |
|------------|---|--|---|---------|--------|-----------|---|---|--|----|
| 3/1/2022 | Paramount City CS (private lateral) | 1867 - 6301 & 6439 Alondra Boulevard, Paramount | 183000 (estimate, uncertain start date) | 7,600 | 0 | 175,400 | Grease Deposition | Los Angeles River | Closed all 9 coastal beaches. | 6 |
| 3/15/2023 | Los Angeles County Sanitation Districts | Joint Outfall B - Unit 1C Trunk Sewer (Joint Outfall System) | 28,625 | 6,700 | 6,700 | 21,925 | Flow Exceeded Capacity | Los Angeles River | Closed all 9 coastal beaches. | 14 |
| 4/20/2023 | Los Angeles County Sanitation Districts | Joint Outfall B - Unit 1C Trunk Sewer (Joint Outfall System) | 539,845 | 288,942 | 0 | 250,903 | CS maintenance Caused Spill / Damage | Rio Hondo Channel, Los Angeles River, and Pacific Ocean | Closed all 9 coastal beaches. | 7 |
| 6/3/2023 | Alhambra City CS | 1010 E. BEACON | 24,960 | 260 | 0 | 24,710 | believed to have been caused by blockage due to roots and grease | Alhambra Wash | All Coastal Beaches | 1 |

| MEASURE W-FUNDED LONG BEACH PROJECTS | | | | | | | | |
|--|----------------|----------------------------|---|-------------------|-------------------------------|--|--|--|
| Program | Fiscal Year | Status | Project Name | Funding Amount | Watershed(s) | | | |
| Infrastructure Project | FY23- 24 | Under Consider ation | Long Beach Municipal Urban Stormwater Treatment (LB MUST) - Phase 2 | \$10.4M | Lower Los Angeles River | | | |
| Infrastructure Project | FY23- 24 | Under Consider ation | Heartwell Park at Palo Verde Channel Stormwater Capture Project | \$3.3M | Lower San Gabriel River | | | |
| Infrastructure Project | FY22- 23 | Funded | Willow Springs Park Wetland Restoration and Expansion Project | \$1.2M | Lower Los Angeles River | | | |
| Infrastructure Project | FY20- 21 | Funded | Long Beach Municipal Urban Stormwater Treatment (LB MUST) - Phase 1 | \$10.8M | Lower Los Angeles River | | | |
| Infrastructure Project | FY20- 21 | Funded | El Dorado Regional Project | \$3M | Lower San Gabriel River | | | |
| Infrastructure Project | FY20- 21 | Funded | Skylinks Golf Course at Wardlow Stormwater Capture Project | \$10.5M | Lower San Gabriel River | | | |
| Technical Resource | FY20- 21 | Funded | Willow Springs Park: Wetland Restoration Expansion | \$300k | Lower Los Angeles River | | | |
| Municipal Infrastructure Project | N/A | Funded | El Dorado Regional Park Duck Pond Rehabilitation | \$9M | Lower San Gabriel River | | | |
| Municipal Infrastructure Project | N/A | Funded | Trash Capture Device Installations | \$240k | Lower Los Angeles River +1 | | | |
| Municipal Infrastructure Project | N/A | Funded | City Facilities BMPs | \$N/A | Lower Los Angeles River +1 | | | |
| Municipal Infrastructure Project | N/A | Funded | City Facilities BMPs | \$N/A | Lower Los Angeles River +1 | | | |
| Municipal Infrastructure Project | N/A | Funded | Green Streets Master Plan Development and Implementation of Green Streets Projects | \$1M | Lower Los Angeles River +1 | | | |
| Municipal Infrastructure Project | N/A | Funded | Stormwater Projects Master Plan Development and Implementation of Stormwater Projects | \$1M | Lower Los Angeles River +1 | | | |

| LOWER LA RIVER MEASURE W-FUNDED REGIONAL PROJECTS | | | | | | | |
|--|-----------------|----------------|--|--|--|--|--|
| Project | City | Funding Amount | | | | | |
| Spane Park | Paramount | \$892K | | | | | |
| Furman Park Stormwater Capture and Infiltration Project | Downey | \$12.3M | | | | | |
| John Anson Park Infiltration Cistern | Bell Gardens | \$10M | | | | | |
| Compton Blvd Et Al. Project | LA County | \$600K | | | | | |
| Urban Orchard | South Gate | \$5.4M | | | | | |
| Lynwood City Park Stormwater Capture Project | Lynwood | \$1.7M | | | | | |
| Apollo Park Stormwater Capture Project | Downey | \$2.8M | | | | | |
| Salt Lake Park Infiltration Cistern | Huntington Park | \$29M | | | | | |

| LOWER SAN GABRIEL RIVER MEASURE W-FUNDED REGIONAL PROJECTS | | | | | | | |
|--|-----------------------|----------------|--|--|--|--|--|
| Project | City | Funding Amount | | | | | |
| York Field Stormwater Capture Project | Whittier | \$1.9 M | | | | | |
| Adventure Park Multi Benefit Stormwater Capture Project | LA County-in Whittier | \$13.5 M | | | | | |
| Hermosillo Park | Norwalk | \$20.1M | | | | | |
| Bellflower Simms Park Stormwater Capture Project | Bellflower | \$2.1M | | | | | |
| Caruthers Park | Bellflower | \$855K | | | | | |
| Mayfair Park | Lakewood | \$1.3M | | | | | |
| Bolivar Park | Lakewood | \$1.3M | | | | | |
| Lakewood Equestrian Center | Lakewood | \$1.1M | | | | | |
| Cerritos Sports Complex | Cerritos | \$2.4M | | | | | |
| LSGR Feasibility: Sorenson Park Multi-Benefit Stormwater Capture Project | LA County | \$300K | | | | | |